

Ceramic Crystal Oscillator Full Can HCMOS/TTL

MOFC series

MERITEK

FEATURE

- Output Logic: HCMOS/TTL
- Small SMD Ceramic Package
- High precision and high frequency stability
- Applications: Wireless, Mobile Communication, WiMAX, WLAN, PDA, DSD, Notebook



PART NUMBERING SYSTEM

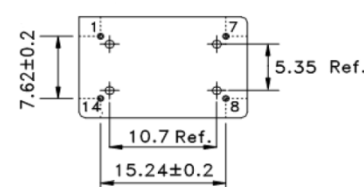
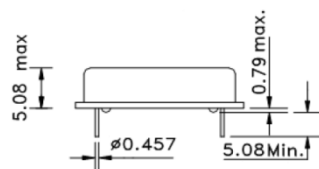
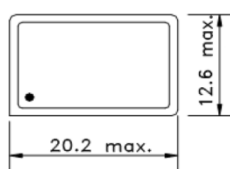
MOF C 50 J C 50M0
(1) (2) (3) (4) (5) (6)



No	Item	Code	Description	Series Reference (options)
(1)	Meritek Series	MOH	Oscillator Unit	Ceramic SMD Crystal Oscillator Full Can
(2)	Logic	C	C: HCMOS/TTL	C: HCMOS/TTL
(3)	Supply Voltage	50	50: 5.0V	50: 5.0V
(4)	Frequency Stability	J	J: ± 50 ppm	F: ± 20 ppm, G: ± 25 ppm, H: ± 30 ppm (see avail options)
(5)	Operating Temp.	C	C: $-20 \sim +70^{\circ}\text{C}$	A: $-10 \sim +60^{\circ}\text{C}$, B: $0 \sim +70^{\circ}\text{C}$, I: $-40 \sim +85^{\circ}\text{C}$ (see options)
(6)	Frequency	50M0	50M0: 50.000MHz	25K0 ~ 180M0 (K and M denotes decimal point)
(7)	Pin 1	Blank	Blank: Tri-State	N: No Connection
(8)	Output Load	Blank	Blank: 15pF	Blank: 15pF (Standard)
(9)	Duty Cycle	Blank	Blank: 45/55%	T: 40/60%

DIMENSIONS AND RECOMMENDED PATTERN

Pin	Function
1	Tri-State Enable/Disable
7	GND/Case
8	Output
14	Vdd



(Unit:mm)

AVAILABLE OPTIONS

Parameters	Part Number Options
Supply Voltage	25: 2.5V $\pm 10\%$, 33: 3.3V $\pm 10\%$
Frequency Stability	F: ± 20 ppm, G: ± 25 ppm, H: ± 30 ppm, J: ± 50 ppm, K: ± 100 ppm
Operating Temp.	A: $-10 \sim +60^{\circ}\text{C}$, B: $0 \sim +70^{\circ}\text{C}$, C: $-20 \sim +70^{\circ}\text{C}$, K: $-30 \sim +85^{\circ}\text{C}$, I: $-40 \sim +85^{\circ}\text{C}$, R: $-40 \sim +105^{\circ}\text{C}$

Note: Custom options available. Contact Meritek for more information.

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ELECTRICAL CHARACTERISTICS

Parameters		Characteristic
Frequency Range		0.25 ~ 180.000 MHz
Logic		HCMOS/TTL
Supply Voltage		5.0V $\pm 10\%$ (see options)
Frequency Stability		± 50 ppm (see options)
Operating Temperature		-20 ~ +70°C (see options)
Storage Temperature		-55 ~ +125°C
Duty Cycle		50 $\pm 5\%$
Aging @25°C (first year)		± 5 ppm
CMOS Load Max		15pF/50pF max.
TTL Load Max		10TTL
Output Level (CMOS)	High (Logic 1)	90% Vdd min.
	Low (Logic 0)	10% Vdd max.
Supply Current		See Table 1
Start Up Time		5ms max. (15pF) / 10mSec max. (50pF)
Rise/ Fall Time (Tr/Tf)	250.00 KHz ~ 180.00 MHz	5nSec max.
Tri-State (Input Pin 1)	Enable High or Float	0.7 Vdd min.
	Disable Low or GND	0.3 Vdd max.
RMS Phase Jitter (12Khz~20MHz)		± 25 pSec max.

TABLE 1: SUPPLY CURRENT (mA max.)

Frequency	5.0V
25.00 KHz ~ 9.999 MHz	15
10.000 MHz ~ 23.999 MHz	15
24.000 MHz ~ 49.999 MHz	30
50.000 MHz ~ 79.999 MHz	40
80.000 MHz ~ 180.000 MHz	50

*Specifications subject to change without notice.